teachings; a reasonable expectation of success; and a teaching or suggestion provided by the prior art reference (or references when combined) of all the claimed limitations. The following comments address these requirements of a rejection under 35 U.S.C. § 103(a).

In particular, Watson and Goodchild do not provide the claimed method of combining multiple genetic functionality-encoding nucleic acids into a single vector. The claimed invention requires that each nucleic acid component provide a distinct functionality. In contrast, the Watson reference fails to teach or suggest this aspect of the claimed invention.

Figure 11-14 illustrates the teachings of Watson, and depict a process for "gene synthesis by ligation of complementary oligonucleotides" in which multiple synthetic oligonucleotides, each consisting of a segment of a functional gene, are ligated together to reconstitute a single isolated double-stranded DNA molecule that encodes a (single) protein of interest. Thus the Watson reference teaches combining multiple synthetic oligonucleotides which constitute fragments of a functionality-encoding gene sequence. Such fragments do not individually provide independent genetic functions to the resulting vector, but rather combine to provide a single genetic functionality to the vector. In contrast, the method of claim 1 requires that each of at least two nucleic acid components supply "at least one genetic element providing a functionality". Similarly, independent claim 31, as amended, requires linkage of nucleic acid components which encode a functionality such as an origin of replication, a selectable marker or a particular functionality-encoding insert of interest. Furthermore, since claims 2-17, and 25-30 are dependent from claim 1, and since claims 32, 33 and 36-38 are dependent from claim 31, all of the claims cited by the Examiner require the combination of multiple nucleic acid components which each encode a functionality.

Next, the Examiner has cited Goodchild because "Goodchild teaches covalently modified nucleic acids using biotinylation, fluorescent tagging and conjugation of enzymes". In particular the Examiner cites Table VI of Goodchild and "Applicants (admission) that modifications to form products such as PNA and yeast artificial chromosomes 'can be performed by a variety of art known techniques'." Applicants assert that these citations neither teach nor suggest the claimed invention singly or in combination with the Watson reference discussed above. Indeed this citation from the Examiner merely supports the notion that there are methods available for both the chemical derivatization of the nucleic acid components and, furthermore, for the chemical joining of these nucleic acid components. These available methods may be used in conjunction with the method of the present invention. Applicants do not contend that the pending claims are distinguished by novel methods of chemical derivatization and/or chemical joining. While the open language of these method claims would allow for the incorporation of derivatization of the nucleic acid components, such an application is neither required nor a particular distinguishing feature of the claimed invention. Furthermore, the mere fact that there

are known methods for joining nucleic acid molecules does not render obvious their use in an otherwise novel methodology for producing combinatorial vector libraries. Still further, these citations by the Examiner do not provide a motivation to alter the teachings of Watson to arrive at the claimed invention. Accordingly, the Goodchild reference and the "Applicants (admissions)," considered alone or in combination with the Watson reference, do not render the claimed invention obvious under 35 U.S.C. §103.

The Examiner has further rejected claims 1-42 under 35 U.S.C. §103(a) over the preceding references and "in further view of the 1988 Stratagene Catalog". In particular, the Examiner states that the "Stratagene (catalog) shows gene characterization kits providing a variety of different reagents....which have been assembled and premixed specifically for a defined set of experiments." The Stratagene catalog reference appears to have been cited specifically to support a rejection of claims 39-41, drawn to kits having reagents for use in the method of the invention. Applicants have amended claims 39-41 to reflect kits providing multiple nucleic acid components, each of which provides a functionality. Claim 42 has been similarly amended. These amendments serve to further define a preferred embodiment of the claimed invention, but are not meant to limit the scope of the present invention and Applicants preserve the right to claim additional patentable subject matter in related applications.

For the foregoing reasons, Applicants believe that the references cited by the Examiner do not render the claimed subject matter *prima facie* obvious under 35 U.S.C § 103(a). Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

If the Examiner maintains the present rejection, it is respectfully requested that the Examiner specifically address these arguments. The instant office action does no more than recite specific elements without any discussion of how these elements provide any motivation to modify the teachings of the cited references to arrive at the claimed invention.

For the foregoing reasons, Applicants respectfully request reconsideration and withdrawal of the pending rejections. Applicants believe that the claims are now in condition for allowance and early notification to this effect is earnestly solicited.

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